environments, lost wildlife viewing, resulting from population losses, by residents of local areas bordering the provinces in which the population losses occurred. [A province is one of the geographic areas delineated in Table 8.1, Volume I of the NRDAM/GLE technical document.];

- (9) Lost beach visitation due to closure; and
- (10) For the type A procedure for Great Lakes environments, lost boating due to closure.
- (c) If the authorized official uses both type A and type B procedures, he or she must explain in the Assessment Plan how he or she intends to prevent double recovery.
- (d) When the authorized official uses type B procedures for injuries not addressed in a type A procedure, he or she must follow all of subpart E (which contains standards for determining and quantifying injury as well as determining damages), §11.31(c) (which addresses content of the Assessment Plan), and §11.37 (which addresses confirmation of exposure). When the authorized official uses type B procedures for compensable values that are not included in a type A procedure but that result from injuries that are addressed in the type A procedure, he or she need not follow all of subpart E, §11.31(c), and §11.37. Instead, the authorized official may rely on the injury predictions of the type A procedure and simply use the valuation methodologies authorized by §11.83(c) to calculate compensable value. When using valuation methodologies, the authorized official must comply with §11.84.

[61 FR 20610, May 7, 1996]

§ 11.37 Must the authorized official confirm exposure before implementing the Assessment Plan?

- (a) Before including any type B methodologies in the Assessment Plan, the authorized official must confirm that at least one of the natural resources identified as potentially injured in the preassessment screen has in fact been exposed to the released substance.
- (b) *Procedures*. (1) Whenever possible, exposure shall be confirmed by using existing data, such as those collected for response actions by the OSC, or

other available studies or surveys of the assessment area.

- (2) Where sampling has been done before the completion of the preassessment screen, chemical analyses of such samples may be performed to confirm that exposure has occurred. Such analyses shall be limited to the number and type required for confirmation of exposure.
- (3) Where existing data are unavailable or insufficient to confirm exposure, one or more of the analytical methodologies provided in the Injury Determination phase may be used. The collection and analysis of new data shall be limited to that necessary to confirm exposure and shall not include testing for baseline levels or for injury, as those phrases are used in this part.
- [51 FR 27725, Aug. 1, 1986. Redesignated and amended at 61 FR 20610, 20611, May 7, 1996]

§ 11.38 Assessment Plan—preliminary estimate of damages.

- (a) Requirement. When performing a type B assessment pursuant to the requirements of subpart E of this part, the authorized official shall develop a preliminary estimate of: the anticipated costs of restoration, rehabilitation, replacement, and/or acquisition of equivalent resources for the injured natural resources; and the compensable value, as defined in §11.83(c) of this part, of the injured natural resources, if the authorized official intends to include compensable value in the damage claim. This preliminary estimate is referred to as the preliminary estimate of damages. The authorized official shall use the guidance provided in this section, to the extent possible, to develop the preliminary estimate of damages.
- (b) Purpose. The purpose of the preliminary estimate of damages is for reference in the scoping of the Assessment Plan to ensure that the choice of the scientific, cost estimating, and valuation methodologies expected to be used in the damage assessment fulfills the requirements of reasonable cost, as that term is used in this part. The authorized official will also use the preliminary estimate of damages in the

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review of the Assessment Plan, as required in §11.32(f) of this part, to ensure the requirements of reasonable cost are still met.

- (c) Steps. The preliminary estimate of damages should include consideration of the ability of the resources to recover naturally and, if relevant, the compensable value through the recovery period with and without possible alternative actions. The authorized official shall consider the following factors, to the extent possible, in making the preliminary estimate of damages:
- (1) The preliminary estimate of costs of restoration, rehabilitation, replacement, and/or acquisition of equivalent resources should include consideration of a range of possible alternative actions that would accomplish the restoration, rehabilitation, replacement, and/or acquisition of the equivalent of the injured natural resources.
- (i) The preliminary estimate of costs should take into account the effects, or anticipated effects, of any response actions.
- (ii) The preliminary estimate of costs should represent the expected present value of anticipated costs, expressed in constant dollars, and should include direct and indirect costs, and include the timing of those costs. The provisions detailed in §§11.80–11.84 of this part are the basis for the development of the estimate.
- (iii) The discount rate to be used in developing the preliminary estimate of costs shall be that determined in accordance with the guidance in §11.84(e) of this part.
- (2) The preliminary estimate of compensable value should be consistent with the range of possible alternatives for restoration, rehabilitation, replacement, and/or acquisition of equivalent resources being considered.
- (i) The preliminary estimate of compensable value should represent the expected present value of the anticipated compensable value, expressed in constant dollars, accrued through the period for the restoration, rehabilitation, replacement, and/or acquisition of equivalent resources to baseline conditions, i.e., between the occurrence of the discharge or release and the completion of the restoration, rehabilitation, replacement, and/or acquisition of

the equivalent of the injured resources and their services. The estimate should use the same base year as the preliminary estimate of costs of restoration, rehabilitation, replacement, and/or acquisition of equivalent resources. The provisions detailed in §\$11.80-11.84 of this part are the basis for the development of this estimate.

- (ii) The preliminary estimate of compensable value should take into account the effects, or anticipated effects, of any response actions.
- (iii) The discount rate to be used in developing the preliminary estimate of compensable value shall be that determined in accordance with the guidance in §11.84(e) of this part.
- (d) Content and timing. (1) In making the preliminary estimate of damages, the authorized official should rely upon existing data and studies. The authorized official should not undertake significant new data collection or perform significant modeling efforts at this stage of the assessment planning phase.
- (2) Where possible, the authorized official should make the preliminary estimate of damages before the completion of the Assessment Plan as provided for in §11.31 of this part. If there is not sufficient existing data to make the preliminary estimate of damages at the same time as the assessment planning phase, this analysis may be completed later, at the end of the Injury Determination phase of the assessment, at the time of the Assessment Plan review.
- (3) The authorized official is not required to disclose the preliminary estimate before the conclusion of the assessment. At the conclusion of the assessment, the preliminary estimate of damages, along with its assumptions and methodology, shall be included in the Report of the Assessment as provided for in §11.91 of this part.
- (e) Review. The authorized official shall review, and revise as appropriate, the preliminary estimate of damages at the end of the Injury Determination and Quantification phases. If there is

any significant modification of the preliminary estimate of damages, the authorized official shall document it in the Report of the Assessment.

[59 FR 14282, Mar. 25, 1994. Redesignated at 61 FR 20610, May 7, 1996]

Subpart D—Type A Procedures

§11.40 What are type A procedures?

(a) A type A procedure is a standardized methodology for performing Injury Determination, Quantification, and Damage Determination that requires minimal field observation. There are two type A procedures: the type A procedure for coastal and marine environments; and the type A procedure for Great Lakes environments. The type A procedure for coastal and marine environments incorporates a computer model called the Natural Resource Damage Assessment Model for Coastal and Marine Environments Version 2.51 (NRDAM/CME). The NRDAM/CME technical document (incorporated by reference, see §11.18) includes and explains the NRDAM/CME. The type A procedure for Great Lakes environments incorporates a computer model called the Natural Resource Damage Assessment Model for Great Lakes Environments Version 1.51 (NRDAM/ GLE). The NRDAM/GLE technical document (incorporated by reference, see §11.18) includes and explains the NRDAM/GLE. The authorized official must follow §§ 11.41 through 11.44 when using the type A procedures.

(b) The reasonable and necessary costs incurred in conducting assessments under this subpart shall be limited to those costs incurred or anticipated by the authorized official for, and specifically allocable to, incidentspecific efforts taken in the assessment of damages for natural resources for which the agency or Indian tribe is acting as trustee. Such costs shall be supported by appropriate records and documentation, and shall not reflect regular activities performed by the agency or the Indian tribe in management of the natural resource. Activities undertaken as part of the damage assessment shall be taken in a manner that is cost-effective, as that phrase is used in this part.

[52 FR 9096, Mar. 20, 1987, as amended at 53 FR 5175, Feb. 22, 1988; 61 FR 20611, May 7, 1996; 62 FR 60459, Nov. 10, 1997; 65 FR 6014, Feb. 8, 2000]

§11.41 What data must the authorized official supply?

- (a) The NRDAM/CME and the NRDAM/GLE require several data inputs to operate. The authorized official must develop the following data inputs:
- (1) The identity of the released substance;
- (2) The mass or volume of the identified substance that was released;
 - (3) The duration of the release;
 - (4) The time of the release;
- (5) The location of the release;
- (6) The wind conditions;
- (7) The extent of response actions;
- (8) The extent of any closures;
- (9) The implicit price deflator; and (10) For the NRDAM/CME, the condi-
- (10) For the NRDAM/CME, the condition of the currents and tides.
- (b) The authorized official must change the data in the NRDAM/CME and the NRDAM/GLE for the following parameters if he or she is aware of more accurate data:
 - (1) Air temperature:
 - (2) Water temperature at the surface;
- (3) Total suspended sediment concentration;
- (4) Mean settling velocity of suspended solids; and
- (5) Habitat type.
- (c)(1) If the release occurred in Alaska and the authorized official is not aware of any reliable evidence that ice was absent from the site of the release, then he or she must turn on the ice modeling function. Otherwise, the authorized official must leave the ice modeling function off.
- (2) If the release occurred in the Great Lakes and the authorized official is aware of reliable evidence that ice was absent from the site of the release, then he or she must turn off the ice modeling function.
- (d) The authorized official must develop the data inputs and modifications and include them in the Assessment Plan in the format specified in Appendix II (for the NRDAM/CME) or Appendix III (for the NRDAM/GLE).

[61 FR 20611, May 7, 1996]